

CLAIM AMENDMENTS

Claim Amendment Summary

Claims pending

- Before this Amendment: Claims 1-18, 40-43, 49-50.
 - After this Amendment: Claims 1-11, 13-19, and 51-58.

Non-Elected, Canceled, or Withdrawn claims: 12, 18-50.

Amended claims: 8 and 13.

New claims: 51-58.

Claims:

1. (ORIGINAL) A method for efficient transmission of TCP/IP headers via a wireless communications link from a sender to a receiver, the method comprising:

obtaining TCP/IP packets having associated TCP/IP headers;
losslessly compressing the associated headers;
feedback-independently transmitting of a plurality of the compressed
headers via the communications link;

the transmitting comprising:

adjusting a sliding window within which the plurality of the compressed headers are transmitted, wherein the adjusting is modeled to react to TCP/IP window-size changes that results from the congestion procedures of TCP/IP;

1 using the sliding window, W-LSB encoding the plurality of the
2 compressed headers;

3 sending the resulting W-LSB encoded plurality of compressed
4 headers.

5
6 **2. (ORIGINAL)** A method as recited in claim 1, further
7 comprising inferentially determining whether there is an inconsistent context
8 between the sender and the receiver.

9
10 **3. (ORIGINAL)** A method as recited in claim 1, further
11 comprising:

12 inferentially determining whether there is an inconsistent context between
13 the sender and the receiver;

14 if so, then refreshing the context between the sender and the receiver.

15
16 **4. (ORIGINAL)** A method as recited in claim 1, wherein the
17 sender is a header compressor (HC) and the receiver is a header decompressor
18 (HD).

19
20 **5. (ORIGINAL)** A computer comprising one or more computer-
21 readable media having computer-executable instructions that, when executed by
22 the computer, perform the method as recited in claim 1.

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1 6. (O R I G I N A L) A computer network comprising a computer
 2 comprising one or more computer-readable media having computer-executable
 3 instructions that, when executed by the computer, perform the method as recited in
 4 claim 1.

5
 6 7. (O R I G I N A L) A computer-readable medium having computer-
 7 executable instructions that, when executed by a computer, performs the method
 8 as recited in claim 1.

9
 10 8. (C U R R E N T L Y A M E N D E D) A method for efficient
 11 transmission of network transport-layer protocol headers via a communications
 12 link, the method comprising:

13 obtaining transport-layer protocol packets having associated transport-layer
 14 protocol headers;

15 compressing the associated headers;

16 feedback-independently transmitting of a plurality of the compressed
 17 headers via the communications link;

18 the transmitting comprising:

19 adjusting a sliding window within which the plurality of the
 20 compressed headers are transmitted;

21 using the sliding window, W-LSB encoding the plurality of the
 22 compressed headers;

23 sending the resulting W-LSB encoded plurality of compressed
 24 headers.

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1 9. (ORIGINAL) A method as recited in claim 8, further
2 comprising inferentially determining whether there is an inconsistent context,
3 wherein an inconsistent context is when one or more headers are not properly
4 received by a receiver on the communications link.

5
6 10. (ORIGINAL) A method as recited in claim 8, further
7 comprising:

8 inferentially determining whether there is an inconsistent context, wherein
9 an inconsistent context is when one or more headers are not properly received by a
10 receiver on the communications link;

11 if so, then refreshing the context to make the context consistent.

12
13 11. (ORIGINAL) A method as recited in claim 8, wherein, for the
14 compressing, the headers are compressed losslessly.

15
16 12. (CANCELED)

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1 13. **(CURRENTLY AMENDED)** A method as recited in claim 8,
2 wherein the transmitting comprises: for efficient transmission of network
3 transport-layer protocol headers via a communications link, the method
4 comprising:

5 obtaining transport-layer protocol packets having associated transport-layer
6 protocol headers;

7 compressing the associated headers;

8 feedback-independently transmitting of a plurality of the compressed
9 headers via the communications link;

10 the transmitting comprising:

11 adjusting a sliding window within which the plurality of the
12 compressed headers are transmitted, wherein the adjusting is modeled to
13 react to window size changes of the transport-layer protocol that results
14 from the congestion procedures of such transport-layer protocol;

15 using the sliding window, W-LSB encoding the plurality of the
16 compressed headers;

17 sending the resulting W-LSB encoded plurality of compressed
18 headers.

19
20 14. **(ORIGINAL)** A method as recited in claim 8, wherein the
21 communications link is wireless.

22
23 15. **(ORIGINAL)** A method as recited in claim 8, wherein the
24 network transport-layer protocol is TCP.

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1 **16. (ORIGINAL)** A computer comprising one or more computer-
2 readable media having computer-executable instructions that, when executed by
3 the computer, perform the method as recited in claim 8.

4

5 **17. (ORIGINAL)** A computer network comprising a computer
6 comprising one or more computer-readable media having computer-executable
7 instructions that, when executed by the computer, perform the method as recited in
8 claim 8.

9

10 **18. (ORIGINAL)** A computer-readable medium having computer-
11 executable instructions that, when executed by a computer, performs the method
12 as recited in claim 8.

13

14

15 Claims 19-50 are CANCELED.

16

17

18 **51. (NEW)** A method as recited in claim 13, further comprising
19 inferentially determining whether there is an inconsistent context, wherein an
20 inconsistent context is when one or more headers are not properly received by a
21 receiver on the communications link.

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1 **52. (N E W)** A method as recited in claim 13, further comprising:
2 inferentially determining whether there is an inconsistent context, wherein
3 an inconsistent context is when one or more headers are not properly received by a
4 receiver on the communications link;
5 if so, then refreshing the context to make the context consistent.

6
7 **53. (N E W)** A method as recited in claim 13, wherein, for the
8 compressing, the headers are compressed losslessly.

9
10 **54. (N E W)** A method as recited in claim 13, wherein the
11 communications link is wireless.

12
13 **55. (N E W)** A method as recited in claim 13, wherein the network
14 transport-layer protocol is TCP.

15
16 **56. (N E W)** A computer comprising one or more computer-
17 readable media having computer-executable instructions that, when executed by
18 the computer, perform the method as recited in claim 13.

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1 57. (NEW) A computer network comprising a computer
2 comprising one or more computer-readable media having computer-executable
3 instructions that, when executed by the computer, perform the method as recited in
4 claim 13.

5
6 58. (NEW) A computer-readable medium having computer-
7 executable instructions that, when executed by a computer, performs the method
8 as recited in claim 13.

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